LOCAL CONTENT REQUIREMENTS IN RENEWABLE ENERGY AUCTIONS

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Vasilios Anatolitis
AGENDA

- Motivation
- Design options
- International experience
- Saudi Arabia: Sakaka PV plant
- Key recommendations for LCR implementation
Motivation

- Local Content Requirements (LCR) can influence both (static and dynamic) efficiency as well as effectiveness.
- In many emerging markets, LCR considered an important instrument to foster local manufacturing, implement local supply chains and innovative industries.
- Trade-off:

<table>
<thead>
<tr>
<th>LCOE</th>
<th>LCR</th>
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</thead>
<tbody>
<tr>
<td>• Efficient auction results                                         • Increase local manufacturing/industries</td>
<td></td>
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<tr>
<td>• In general higher competition                                      • Local supply chains and innovative industries</td>
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<tr>
<td>• Savings in subsidies/lower cost for consumers                      • Distinction between job-creation and manufacturing</td>
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## Design options

<table>
<thead>
<tr>
<th>Design</th>
<th>Countries</th>
<th>Achieving LCR</th>
<th>Target specific components</th>
<th>Implementation by country</th>
<th>Implementation by bidder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum requirement to participate</td>
<td>🇯🇪 🇮🇳</td>
<td>☀️</td>
<td>☀️</td>
<td>☀️</td>
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<tr>
<td>Benefits during the auction process</td>
<td>🇹🇷 🇧🇷</td>
<td>☀️</td>
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<tr>
<td>Multi-criteria (point system)</td>
<td>🇨🇳 🇿🇦</td>
<td>☐️</td>
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International experience

Examples from Brazil, China and South Africa

Brazil
- 60% of equipment and 90% of services locally procured (loan from BNDES/PINAME)
- Delays in commissioning
- Increase in FDI
- Local manufacturers not (internationally) competitive

South Africa
- 25-35% to 40-45% over time (effective 7.5% in scoring methodology)
- Multi-criteria auction (70% price, 30% socio-economic)
- Creating rather short-term employment effects and no sustainable industry

China
- 50%-70% LCR in accounting for 20-30% in a point system
- Favourable local conditions (market demand)
- Effective in establishing global PV and wind manufacturers
- Success due to financial incentives and existing infrastructure
Saudi Arabia: Sakaka PV plant (300 MW)

Record low bid of 1.78 USDct/kWh in spite of LCR

- In 2017, REPDO received six bids (out of eight) under 3 USDct/kWh
- EDF/Masdar bid of 1.78 USDct/kWh not shortlisted for final phase (due to financial sustainability/LCR?)
- Saudi company ACWA Power won the tender with 2.34 USDct/kWh

**Background**

<table>
<thead>
<tr>
<th>Land availability</th>
<th>Land for free</th>
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<tbody>
<tr>
<td>Promising market</td>
<td>First-mover advantage – 2020: 3.45 GW, 2023: 9.5 GW, 2030: 200 GW?</td>
</tr>
<tr>
<td>Marketing</td>
<td>Incentive to enter KSA energy market to promote different technologies</td>
</tr>
<tr>
<td>LCR</td>
<td>Moderate level of 30%, can be easily achieved through O&amp;M</td>
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<tr>
<td>Grid connection</td>
<td>Provided by the government</td>
</tr>
<tr>
<td>PPA</td>
<td>FIT for 25 years</td>
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<td>Predevelopment</td>
<td>Conducted by REPDO, which serves as a one-stop shop</td>
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</table>
Key recommendations for LCR implementation

- Transparent and detailed procedure
  - Include third-party monitoring of implementation

- In-depth assessment of prevailing market conditions to ensure effective implementation and to mitigate disadvantages

- LCR design depending on focus of industrial policy (job creation vs. sustainable supply chain)

- Gradual increase of LCR requirements
  - First phase should focus on market establishment
  - Consequent rounds focusing on consolidation of industry

- LCR have to be supported by additional measures (e.g. tax incentives and import taxes, training opportunities, subsidies, etc.)